

CIRM Funded Clinical Trials

## Gene Transfer for Artemis-Deficient Severe Combined Immunodeficiency Using a Lentiviral Vector to Transduce Autologous CD34 Hematopoietic Stem Cells

<b>Disease Area:</b>	Severe Combined Immunodeficiency, Artemis deficient (ART-SCID)
<b>Investigator:</b>	Morton Cowan
<b>Institution:</b>	University of California, San Francisco
<b>CIRM Grant:</b>	CLIN2-10830 (Pre-Active)
<b>Award Value:</b>	\$12,000,000
<b>Trial Sponsor:</b>	University of California, San Francisco
<b>Trial Stage:</b>	Phase 1
<b>Trial Status:</b>	Launching
<b>Targeted Enrollment:</b>	N/A



Morton Cowan

### Details:

UC San Francisco researchers aim to repair the damaged immune system of children born with severe combined immunodeficiency (SCID), a genetic blood disorder in which even a mild infection can be fatal. This trial will focus on SCID patients who have mutations in a gene called Artemis, the most difficult form of SCID to treat when using a standard bone marrow transplant from a healthy donor. The team will genetically modify the patient's own blood stem cells with a functional copy of Artemis, with the goal of creating a new blood system and restoring the health of the immune system.

### Design:

Open label, single arm study.

### Goal:

Safety and efficacy. Multilineage engraftment persistence and B cell reconstitution.

**Source URL:** <https://www.cirm.ca.gov/clinical-trial/gene-transfer-artemis-deficient-severe-combined-immunodeficiency-using-lentiviral>